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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,709	03/16/2004	Richard J. Kuehnel	KUEHNEL 3-1	5945
27973 7590 06/07/2007 OFFICE OF THE ASSOC. GEN. COUNSEL (IP & T) 9800 SAVAGE ROAD SUITE 6542 FORT MEADE, MD 20755-6542			EXAMINER YAARY, MICHAEL D	
			ART UNIT 2193	PAPER NUMBER
			MAIL DATE 06/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/808,709	KUEHNEL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael Yaary	2193	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 03/16/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/16/2004</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-4 are pending in the application.

### ***Specification***

2. The specification provides different patent application publication numbers throughout. It is requested that the status of any publication numbers be updated with patent numbers where applicable.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-4 are rejected under 35 U.S.C. 101 as the claims are directed to non-statutory subject matter.

- (i) As to claims 1 and 3, the claims appear to preempt every substantial practical application of the idea that is embodied by the claims. The patent sought is on a method and device for generating an uncorrelated pseudo-random bit sequence. Sets forth in the present claims are a generalized structure and way of determining an uncorrelated

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pseudo-random bit sequence. The device and method are so broad and sweeping as to cover both known and unknown uses of a pseudo-random bit sequence and the end result may vary greatly as to be used in various application types, thus covering both known and unknown uses of the pseudo-random bit sequence. Suggested ways to overcome the rejection would be to incorporate into the claims, as taught by the specification, specific implementation of which the claimed invention may be used for. An example would be as provided in the specification on page 5, lines 6-12 where pseudo-random number generation is provided for a cryptographical system.

(ii) Claims 2 and 4 are rejected for similar reasons as discussed for their respective parent claims, as they fail to present any limitations that resolve the deficiencies of the claims from which they depend.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Den Ende (US Pat. 4,780,840).

7. **As to claim 3**, Van Den Ende discloses a method of generation an uncorrelated pseudo-random bit sequence (abstract), comprising the steps of:

(a) selecting a user-definable value  $K$ , where  $K$  is a positive integer (column 2, lines 53-59);

(b) factoring  $K+1$  into  $m$  prime factors  $q_1, q_2, \dots, q_m$  (column 2, lines 43-59);

(c) generating  $m$  pseudo-random sequences  $r_1, r_2, \dots, r_m$ , where each pseudo-random bit sequence  $r_i$  is uniformly distributed over a range  $(0, \dots, q_i-1)$ , and where  $i = 1, 2, \dots, m$  (column 1, lines 38-60); and

(d) generating the uncorrelated pseudo-random sequences as

$R = r_i + q_1 r_2 + q_1 q_2 r_3 + \dots + q_1 q_2 \dots q_{m-1} r_m$  (column 3, lines 17-48).

8. **As to claim 4**, Van Den Ende discloses wherein the step of factoring  $K+1$  into  $m$  prime factors  $q_1, q_2, \dots, q_m$ , is comprised of factoring  $K+1$  into  $m$  prime factors  $q_1, q_2, \dots, q_m$ , where  $q_1, q_2, \dots, q_m$  are ordered from smallest value  $q_m$  to largest value  $q_1$  (column 2, line 60-column 3, line 16).

***Allowable Subject Matter***

9. Claims 1-2 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101 set forth in this Office action.

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### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Yaary whose telephone number is (571) 270-1249. The examiner can normally be reached on Monday-Friday, 8:00 a.m - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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